

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application. Please amend the claims as indicated below:

Listing of Claims

1. (Currently Amended) A lithographic process for producing a ~~one or more~~ microstructure[[s]] from an SU-8 photoresist, wherein the SU-8 photoresist has a thickness in a range of 1.0 mm to 1.5 mm ~~greater than 0.7 mm~~, comprising the steps of:

(i) exposing a prebaked SU-8 photoresist on a substrate to light at a total energy density in a range of ~~about~~ 18,000 to 35,000 mJ/cm^2 , wherein the light comprises a combination of wavelengths including g-line (436nm), h-line (405nm), and i-line (365nm), and wherein the exposing further comprises:

(a) exposing the SU-8 photoresist to the light without a filter;

(b) exposing the SU-8 photoresist to the light with a first filter that filters out ~~about~~ 80% of the light at 365nm;

(c) exposing the SU-8 photoresist to the light with a second filter that filters out ~~about~~ 90% of the light at 365nm; and

(d) exposing the SU-8 photoresist to the light with a third filter that filters out all of the light at 365nm;

(ii) post-baking the SU-8 photoresist at a temperature of at least ~~about~~ 60°C; and

(iii) developing the SU-8 photoresist in a solvent,

whereby [[a]] the microstructure is produced.

Claims 2–8 (Canceled).

9. (Previously Presented) A process as claimed in claim 1, wherein the SU-8 photoresist is an octafunctional epoxidised novolac resin.

Claims 10–14 (Canceled).

15. (Currently Amended) A process as claimed in claim 1, wherein the post-baking step comprises a two step procedure in which the photoresist is heated to a first temperature ~~of at least about~~ that is in a range of 60°C to 70°C and subsequently to a second temperature that is in a range of 90°C to 100°C. ~~higher than the first temperature.~~

16. (Previously Presented) A process as claimed in claim 1, wherein the method includes a step of rinsing the developed photoresist after step (iii) followed by drying.

17. (Previously Presented) A microstructure fabricated using the process of claim 1.

18. (Canceled).

19. (Previously Presented) A microstructure as claimed in claim 17, wherein the microstructure produced by the process comprises an aspect ratio of greater than or equal to 40:1.

20. (Currently Amended) A process as claimed in claim 1, wherein the step of (a) exposing the SU-8 photoresist to the light without a filter further comprises delivering ~~about~~ 1512 mJ/cm^2 to the photoresist.

21. (Currently Amended) A process as claimed in claim 1, wherein the step of (b) exposing the SU-8 photoresist to the light with a first filter that filters out ~~about~~ 80% of the light at 365nm further comprises delivering ~~about~~ 2268 mJ/cm^2 to the photoresist.

22. (Currently Amended) A process as claimed in claim 1, wherein the step of (c) exposing the SU-8 photoresist to the light with a second filter that filters out ~~about~~ 90% of the light at 365nm further comprises delivering ~~about~~ 3780 mJ/cm^2 to the photoresist.

23. (Currently Amended) A process as claimed in claim 1, wherein the step of (d) exposing the SU-8 photoresist to the light with a third filter that filters out all of the light at

365nm further comprises delivering ~~about~~ 17010 mJ/cm^2 to the photoresist.

24. (Previously Presented) A process as claimed in claim 1, wherein the light is UV light emitted from a high pressure mercury lamp.